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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TORRES, ALICIA M

ART UNIT

PAPER NUMBER

3671

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)
	10/054,747	KRETSCH, KEVIN R.
Period for Reply	Examiner	Art Unit
	Alicia M Torres	3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) ____ is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-27 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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Specification

1. The disclosure is objected to because of the following informalities:
the word "show" in line 29 of page 1 should be changed to --shows--;
the word "fragment" in line 26 of page 2 should be changed to --fragments--;
the word "be" is missing from line 25 of page 4 and from line 28 of page 7.
Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson et al, hereafter Thompson.

Thompson discloses a weed control system for a body of water, the system comprising:
a weed contacting member (28), including a cross-bar (35') having a plurality of tines (36) extending from a body of the cross-bar (35'), as per claim 3, suspendable within the body of water (40) proximate a bed of weeds; and
a drive member (20) for automatically moving the weed contacting member (28) repeatedly over the bed of weeds such that the weed contacting member (28) repeatedly brushes against any weeds in the bed of weeds.

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4. Claims 1, 2, 4, 8, 10 and 12-14, 25, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Blumenfeld '027.

5. In regards to claims 1, 2, and 4, Blumenfeld '027 discloses a weed control system for a body of water, the system comprising:

a weed contacting member (90) suspendable within the body of water (27) proximate the bed of weeds; and

a drive member (39) for automatically moving the weed contacting member (90) repeatedly over the bed of weeds such that the weed contacting member (90) repeatedly brushes against any weeds in the bed of weeds;

wherein the weed contacting member (90) is flexibly attached to a support member (56) which is located approximately on or above a surface of the body of water (27), as per claim 2;

wherein the drive member (39) is reversible and is configured to change a direction of movement of the weed contacting member (90) when a pre-determined time limit is reached, as per claim 4.

6. In regards to claims 8, 10, Blumenfeld '027 discloses a weed control system for a body of water the system comprising:

a weed contacting member (90); and

water activated means (see column 3, lines 70-73) for moving the weed contacting member (90) in a repeating pattern through the body of water (27) such that the weed contacting member (90) repeatedly contacts any weeds in a path of the weed contacting member (90);

wherein the weed contacting member (90) is suspended from a support member (56) which has a first end rotatably coupled to a stationary unit (10) proximate the body of water (27) and which extends over a surface of the body of water (27), as per claim 10.

7. In regards to claims 12-14, Blumenfeld '027 discloses a weed control system for a body of water, the system comprising:

a support member (56);

a buoyant member (88) coupled to the support member (56) to keep the support member (56) at or above a surface of the body of water (27);

a weed contacting member (90) suspended from the support member (56) to descend beneath the surface of the body of water (27); and

a driver (39) to move the support member (56) across the surface of the body of water (27) in a repeating pattern such that the weed contacting member (90) repeatedly brushes against any weeds beneath the support member (56);

wherein the support member (56) includes an elongated pipe having a first end rotatably coupled to a stationary unit (10) proximate the body of water (27), as per claim 13; and

wherein the driver includes a water activated driver coupled to the support member (see column 3, lines 70-73), as per claim 14.

8. In regards to claim 25, Blumenfeld '027 discloses a device wherein the following method is inherent, the method comprising repeatedly brushing a bed of weeds with a weed contacting member (90) which is suspended from a support member (56) located proximate a surface of the body of water (27).

9. In regards to claim 27, Blumenfeld '027 discloses a device wherein the following method is inherent, the method comprising:

coupling a first end of a support member (56) to a stationary unit (10) proximate the body of water (27) such that the support member (56) extends over a surface of the body of water (27);

suspending a weed contacting member (90) from the support member (56) such that the weed contacting member (90) is located beneath the surface; and

moving the support member (56) in a repeating pattern such that the weed contacting member (90) repeatedly brushes against any weeds located proximate the weed contacting member (90).

10. Claims 8, 11, 17-20, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Majkrzak, as cited by applicant.

11. In regards to claims 8 and 11, Majkrzak discloses a weed control system for a body of water, the system comprising:

a weed contacting member (24); and

water activated means (see column 7, lines 64-66) for moving the weed contacting member (24) in a repeating pattern through the body of water such that the weed contacting member (24) repeatedly contacts any weeds in a path of the weed-contacting member (24); and

wherein water activated means automatically changes a direction of movement of the weed-contacting member (24) when a pre-determined time limit is reached (see column 7, lines 60-63), as per claim 11.

12. In regards to claims 17-20, Majkrzak discloses a weed control system for a body of water, the system comprising:

a weed contacting member (24), suspended from a support member (18) such that the weed contacting member (24) brushes against any weeds in the bed of weeds, as per claim 18; means (14) for moving the weed contacting member (24), including a water activated means (see column 7, lines 64-67), as per claim 19, and a motor-driven means, as per claim 20, through the body of water proximate a bed of weeds; and

a controller which, in response to a timer, periodically reverses the direction of the means for moving such that the weed-contacting member (24) is repeatedly moved back and forth across the bed of weeds (see column 7, lines 60-63).

13. In regards to claims 25 and 26, Majkrzak discloses a weed controlling device wherein the following method is inherent, the method comprising:

repeatedly brushing a bed of weeds with a weed contacting member (24) which is suspended from a support member (18) located proximate a surface of the body of water, as per claim 25; and

periodically reversing a direction of the weed contacting member (24) in response to a timer such that the weed contacting member (24) moves back and forth over the bed of weeds (see column 7, lines 60-63), as per claim 26.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Majkrzak, as cited by applicant.

16. In regards to claim 4, the device is disclosed as applied to claim 1 above. However, Thompson fails to disclose wherein the drive member is reversible and is configured to changed direction of movement of the weed-contacting member when a pre-determined time limit is reached.

Majkrzak discloses a similar device wherein the drive member (14) is reversible and is configured to change direction of movement of the weed-contacting member (24) when a pre-determined time limit is reached (see column 7, lines 60-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the timing system of Majkrzak on the rake of Thompson in order to use the weed remover when the area is not being used.

17. In regards to claim 7, the device is disclosed as applied to claim 1 above. However, Thompson fails to disclose wherein the drive member includes a motor-driven wheel which rolls over a floor of the body of water.

Majkrzak discloses a similar weeding device wherein the drive member (14) includes a motor-driven wheel (24) which rolls over a floor of the body of water.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the roller of Majkrzak on the weeding device of Thompson in order to remove weeds.

18. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Henrickson.

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The device is disclosed as applied to claim 1 above. However, Thompson fails to disclose wherein the drive member includes a pair of opposing nozzles which alternately eject a jet of water to drive the drive member.

Henrickson discloses a similar device wherein the drive member includes a pair of opposing nozzles (63, 55) which alternately eject a jet of water to drive the drive member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the drive member of Henrickson on the device of Thompson in order to provide a highly efficient self-propelled tool.

19. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Beaumont.

The device is disclosed as applied to claim 1 above. However, Thompson fails to disclose wherein the drive member includes a reversible propeller.

Beaumont discloses a similar device (11) wherein the drive member includes a reversible propeller (58, 59, see column 5, lines 51-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the reversible propeller of Beaumont on the device of Thompson in order to provide directional control to the underwater apparatus.

20. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Majkrzak in view of Henrickson.

The device is disclosed as applied to claim 8 above. However, Thompson fails to disclose wherein water activated means includes a water pump coupled to a first nozzle and a second

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nozzle which open in generally opposite directions from each other and which are alternately activated.

Henrickson discloses a similar device wherein water activated means includes a water pump coupled to a first nozzle (55) and a second nozzle (63) which open in generally opposite directions from each other and which are alternately activated.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the water propulsion means of Henrickson on the device of Thompson in order to provide directional control to the underwater apparatus.

21. Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenfeld '027 in view of Majkrzak.

In regards to claim 11, Blumenfeld '027 discloses the device as applied to claim 8 above. However, Blumenfeld '027 fails to disclose wherein water activated means automatically changes a direction of movement of the weed-contacting member when a pre-determined time limit is reached.

Majkrzak discloses a similar device wherein the drive means automatically changes a direction of movement of the weed-contacting member (24) when a pre-determined time limit is reached (see column 7, lines 60-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the timer of Majkrzak on the device of Blumenfeld '027 in order to allow for operation when the area is not being used.

In regards to claim 26, Blumenfeld '027 discloses the device as applied to claim 25 above. However, Blumenfeld '027 fails to disclose wherein repeatedly brushing includes

periodically reversing a direction of the weed-contacting member in response to a timer such that the weed-contacting member moves back and forth over the bed of weeds.

Majkrzak discloses a similar device wherein repeated brushing includes periodically reversing a direction of the weed-contacting member (24) in response to a timer such that the weed-contacting member (24) moves back and forth over the bed of weeds (see column 7, lines 60-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the timer of Majkrzak on the device of Blumenfeld '027 in order to allow for operation when the area is not being used.

22. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenfeld '027 in view of Beaumont.

The device is disclosed as applied to claim 13 above. However, Blumenfeld '027 fails to disclose wherein the driver includes a reversible propeller.

Beaumont discloses a similar device wherein the driver includes a reversible propeller (58, 59).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the reversible propeller of Beaumont on the device of Blumenfeld in order to provide directional control to the underwater apparatus.

23. Claims 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenfeld '027.

Blumenfeld '027 discloses a weed control system for a body of water, the system comprising:

an elongated support member (56) positioned parallel to a surface of a body of water (27) and positionable at or above the surface, the elongated support member (56) having a first end rotatably coupled to a stationary unit (10) proximate the body of water (27);

a weed contacting member (90) suspended from the support member (56) and located beneath the surface (27); and

a reversible water activated driver (39, see column 3, lines 70-73), as per claim 22, or motor driven driver, as per claim 24, coupled to the elongated support member (56) to drive the elongated support member (56) in a rotating manner repeatedly back and forth across the surface of a section of the body of water (27) such that the weed contacting member (90) is repeatedly pulled back and forth beneath the surface of the section to repeatedly contact any weeds located in that section.

However, Blumenfeld '027 fails to disclose wherein the reversible driver is located proximate a second end of the elongated support member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the driver proximate a second end of the elongated support member, since it has been held that rearranging parts of an invention involves only routine skill in the art.

24. Claims 3 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenfeld '027 in view of Peterson, as cited by applicant.

Blumenfeld '027 discloses the device as applied to claims 1 and 21 above. However, Blumenfeld '027 fails to disclose wherein the weed-contacting member includes a cross-bar having a plurality of tines extending from a body of the cross-bar.

Peterson discloses a similar device wherein the weed-contacting member includes a cross-bar (12) having a plurality of tines (14) extending from a body of the cross-bar (12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the cross-bar structure as taught by Peterson on the device of Blumenfeld '027 in order to distribute stress over the cross-bar.

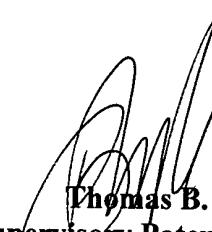
Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lubins, Woods, and Lundquist have been cited as of interest.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-305-3597.



Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671